

Application No. 10/534,429
Response to Office Action of February 6, 2007
Response dated April 5, 2007

REMARKS

Claims 7-11 are pending. Claim 10 has been amended.

The following remarks are made in response to a Final Office Action dated February 6, 2007, in which the Examiner:

rejected claim 8 under 35 USC § 112, paragraph 2, for insufficient antecedent basis;

rejected claims 7, 8 and 10-11 under 35 USC § 102(b) as being anticipated by US Patent No. 6,202,230 to Borders ("Borders I"); and

rejected claim 9 under 35 USC § 103(a) as being unpatentable over Borders I in view of US Patent No. 5,157,800 to Borders ("Borders II").

Applicants thank the Examiner for the courtesy of the telephonic interview on March 26, 2007, wherein the Applicants understanding of a parallelogram joint (with reference to paragraph [0025], FIG. 5 and claim 1) was discussed.

Applicants believe that the Examiner's rejection of claim 8 for insufficient antecedent basis is in error and that the rejection should be applied to claim 10. Claim 8 does not recite "the lower leg strut," whereas claim 10 does. Applicants have amended claim 10 to depend from claim 9, thereby supplying proper antecedent basis.

Claims 7, 8 and 10-11

The Examiner rejected claims 7, 8 and 10-11 as being anticipated by Borders I. Claim 7, which is the only independent claim, is directed to a leg support arrangement for an operating table. Claim 7 recites, at least in part, that each leg support is connected with the base element by means of a parallelogram joint. Each leg support includes an upper leg support and a lower leg support. The joint axes of the parallelogram joint are oriented perpendicular to the plane of the base element. Each upper leg support is connected with a connecting piece by two parallelogram joint forming links, to which connecting piece the first ends of the links are pivotally connected. The connecting piece is pivotally connected

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with the base element for movement about the horizontal folding axis for the upper leg support. The second ends of the two parallelogram joint links are pivotally connected to the upper leg support onto which the folding joint for the lower leg support is formed.

Applicants respectfully submit that the ordinary meaning of the claim terms "parallelogram joint" and "links" should be applied. According to MPEP 2111.01, during examination the claims must be interpreted as broadly as their terms reasonably allow, and this means that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art. Further, the ordinary and customary meaning of a term may be evidenced by a variety of sources, including the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence. Indeed, "claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'." (*In re Marosi*, 710 F.2d 799, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), internal citations omitted, emphasis in original.)

In this regard, Applicants submit that a "parallelogram joint" is a well-known type of four-bar linkage joint, in which the orientation of the coupler link remains unchanged during motion—in other words, the coupler link moves parallel to its original position. (See, for example, a Carnegie Mellon University website, www.cs.cmu.edu/~rapidproto//mechanisms/chpt5.html, Subsection 5.2.1 Examples, Parallelogram Mechanism (copy supplied) and US Patent No. 5,374,050, Abstract, et al.) Furthermore, Applicants submit that the term "link" is also well known in the art as being a rigid body connected to other links at joints, where a joint allows relative movement between the links. In paragraph [0025] of the specification in conjunction with FIG. 5, Applicants disclose that "[t]he two links 34 and 50 form with their joint axes 36, 52 and 44, 54 a parallelogram joint, by means of which the connecting member 42 and with it the upper leg plate 46 can be adjusted parallel to itself without it changing its orientation in space."

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Thus, consistent with these well known understandings of the terms "parallelogram joint" and "links," the specification explicitly discloses that the phrase "parallelogram joint" used in claim 1 includes links joined at axes 36, 52, 44 and 54 such that the upper leg plate can move parallel to itself. In light of the above, Applicants respectfully request that the Examiner give the terms "parallelogram joint" and "links" their ordinary and customary meaning as evidence by the specification and the extrinsic evidence presented herein.

The Examiner has indicated that Borders I discloses that "each leg support is connected with the base element (14,16) by means of a parallelogram joint is defined by post 106 (fig. 11) wherein vertical joint axes (90, 92) (fig. 6) are oriented perpendicular to the horizontal plane of the seat section of base." The Examiner further asserts that "each upper leg support is connected with a connecting piece defined by the first frame section 88 by two parallelogram joint forming links defined by a clevis 100, to which connecting piece the first ends of the links are pivotally connected."

Applicants disagree, and respectfully assert that Borders I fails to disclose that a parallelogram joint connects each leg support to the base element. A parallelogram joint would allow the leg support to move parallel to itself relative to the base element. Borders I fails to disclose a joint that allows the leg support to move parallel to itself without changing orientation. Rather, referring to FIG. 13, Borders I discloses that each leg support 84/88 is connected to seat section 22 with a horizontal pivot joint (around axis 112), a vertical pivot joint (around post 106), and a second horizontal pivot joint (around axis 48). By themselves, or taken all together, these joints connecting the leg support 84/88 of Borders I to the seat section 22 cause the leg support to change orientation as it is moved. Thus, contrary to the Examiner's assertion, Applicants submit that the vertical pivot joint around post 106 does not constitute a parallelogram joint, as would be understood by persons of ordinary skill in the art and as defined in the specification with reference to paragraph [0025] and FIG. 5.

Applicants further submit that clevis 100 does not define two

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parallelogram joint forming links. As noted above, a link is a rigid body connected to other links at joints. At most clevis 100 forms a single link, as clevis 100 is a single rigid body. Thus, it is not possible, given the ordinary and customary meaning of the term "link," for clevis 100 to define two parallelogram forming links.

Furthermore, claim 1 requires that the parallelogram joint axes be oriented perpendicular to the plane of the base element. Claim 1 also requires that each upper leg support is connected with a connecting piece by two parallelogram joint forming links, to which connecting piece the first ends of the links are pivotally connected and that the second ends of the two parallelogram joint links are pivotally connected to the upper leg support. Borders I discloses that clevis 100 pivots around a vertical post 106 and is coupled to frame section 88 via horizontal pivot axis 48 (see FIG. 13). If, *arguendo*, one were to consider the clevis 100 of Borders I to be the two parallelogram joint forming links (as indicated by the Examiner), then the parallelogram joint axes would be the vertical axis 90 (or 92) associated with vertical post 106 and the horizontal axis 48. Although vertical axis 90/92 is perpendicular to the plane of seat section 22, horizontal axis 48 is not perpendicular to seat section 22. Therefore, even if, *arguendo*, clevis 100 was considered to be the two parallelogram joint forming links (which Applicants refute), the joint axes are not oriented perpendicular to the plane of the base element, as required by claim 1.

Claim 9

The Examiner rejected claim 9 as being unpatentable over Borders I in view of Borders II. Claim 9 depends from claim 7 and contains additional recitations thereto. Applicants respectfully submit that Borders II also fails to disclose a parallelogram joint as required by claims 7 and 9, and thus, that Borders II fails to cure the deficiencies of Borders I.

As Applicants have traversed each and every rejection and objection raised by the Examiner, Applicants respectfully request allowance of claims 7-11.

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Should the Examiner withdraw the present rejections without allowing the claims, Applicants respectfully request that the Examiner withdraw the finality of the present office action.

Applicants believe no fees are due with the filing of this Response; however, if it is determined that fees are required, please charge our Deposit Account No. 13-0235.

Respectfully submitted,

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